STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
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FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
 Alexandria, VA 22314

Revised 01/24/05

ERROR DETECTED	SUGGESTED CORRECTION S	erial number: 10/549,352
ATTN: NEW RULES CASES:		A" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
Wrapped Nucleics Wrapped Aminos		wrapped" down to the next line. This may occur if your file reating it. Please adjust your right margin to .3; this will
2Invalid Line Length	The rules require that a line not exceed 7	2 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5th amino acid use space characters, instead.	is misaligned. Do not use tab codes between numbers;
4Non-ASCII	The submitted file was not saved in ASC ensure your subsequent submission is s	II(DOS) text, as required by the Sequence Rules. Please saved in ASCII text.
5Variable Length	each n or Xaa can only represent a sing	resenting more than one residue. Per Sequence Rules, gle residue. Please present the maximum number of each te in the <220>-<223> section that some may be missing.
6Patentin 2.0 "bug"	sequences(s)	the <220>-<223> section to be missing from amino acid atentln would automatically generate this section from the Please manually copy the relevant <220>-<223> section to is applies to the mandatory <220>-<223> sections for
7Skipped Sequences (OLD RULES)	(2) INFORMATION FOR SEQ ID NO:X (i) SEQUENCE CHARACTERIS	II, please insert the following lines for each skipped sequence: (: (insert SEQ ID NO where "X" is shown) TICS: (Do not insert any subheadings under this heading) D NO:X: (insert SEQ ID NO where "X" is shown)
	Please also adjust the "(ii) NUMBER OF	SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intention <210> sequence id number <400> sequence id number 000	nal, please insert the following lines for each skipped sequence.
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected. Per 1.823 of Sequence Rules, use of <220. In <220> to <223> section, please explain.	ed in the Sequence Listing. >-<223> is MANDATORY if n's or Xaa's are present. I location of n or Xaa, and which residue n or Xaa represents.
Invalid <213> Response	Per 1.823 of Sequence Rules, the only va scientific name (Genus/species). <220>- is Artificial Sequence	lid <213> responses are: Unknown, Artificial Sequence, or, <223> section is required when <213> response is Unknown or
IUse of <220>	Use of <220> to <223>; is MANDATOR' "Unknown." Please explain source of get	"Feature" and associated numeric identifiers and responses. Y if <213> "Organism" response is "Artificial Sequence" or netic material in <220> to <223> section. 63, No.!104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
	resulting in missing mandatory numeric id	n of PatentIn version 2.0. This causes a corrupted file, dentifiers and responses (as indicated on raw sequence r" or any other manual means to copy file to floppy disk.
3 Misuse of n/Xaa	"n" can only represent a single nucleotide	; "Xaa" can only represent a single amino acid

AMC - Biotechnology Systems Branch - 09/09/2003



PCT

RAW SEQUENCE LISTING

DATE: 09/28/2005

PATENT APPLICATION: US/10/549,352

TIME: 13:53:52

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Output Set: N:\CRF4\09282005\J549352.raw

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                         PAINE, Jacqueline Ann Mary
                         SHIPTON, Catherine Ann
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         14 <130> FILE REFERENCE: 70237USPCT
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Jumply

Jumply

Jumply

Light And Response,

Light And Res
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/549,352

DATE: 09/28/2005 TIME: 13:53:52

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RAW SEQUENCE LISTING DATE: 09/28/2005

PATENT APPLICATION: US/10/549,352 TIME: 13:53:52

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/549,352

DATE: 09/28/2005 TIME: 13:53:52

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Output Set: N:\CRF4\09282005\J549352.raw

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336	acacgataga	aaacaaaata	tagcgcgcaa	actaggataa	attatcgcgc	gcggtgtcat	3000
338	ctatottact	agatcqqqcc	ttaataagct	tgttaatcat	ggtgtaggca	acccaaataa	3060
340	aacaccaaaa	tatqcacaaq	gcagtttgtt	gtattctgta	gtacagacaa	aactaaaagt	3120
342	aatqaaaqaa	gatgtggtgt	tagaaaagga	aacaatatca	tgagtaatgt	gtgagcatta	3180
344	taggaccacq	aaataaaaag	aacattttga	tgagtcgtgt	atcctcgatg	agcctcaaaa	3240
346	qttctctcac	cccggataag	aaacccttaa	gcaatgtgca	aagtttgcat	tctccactga	3300
348	cataatgcaa	aataagatat	catcgatgac	atagcaactc	atgcatcata	tcatgcctct	3360
350	ctcaacctat	tcattcctac	tcatctacat	aagtatcttc	agctaaatgt	tagaacataa	3420
352	acccataagt	cacgtttgat	gagtattagg	cgtgacacat	gacaaatcac	agactcaagc	3480
354	aaqataaaqc	aaaatgatgt	gtacataaaa	ctccagagct	atatgtcata	ttgcaaaaag	3540
356	aggagagett	ataagacaag	gcatgactca	caaaaattca	tttgcctttc	gtgtcaaaaa	3600
358	qaqqaqqqct	ttacattatc	catgtcatat	tgcaaaagaa	agagagaaag	aacaacacaa	3660
360	tactacatca	attatacata	tctgtatgtc	catcattatt	catccacctt	tcgtgtacca	3720
362	cacttcatat	atcatgagtc	acttcatgtc	tggacattaa	caaactctat	cttaacattt	3780
364	agatgcaaga	gcctttatct	cactataaat	gcacgatgat	ttctcattgt	ttctcacaaa	3840
366	aaqcattcaq	ttcattagtc	ctacaacaac	gaattcggct	tcccgggtac	agggtaaatt	3900
368	tctagttttt	ctccttcatt	ttcttggtta	ggaccctttt	ctctttttat	ttttttgagc	3960
370	tttgatcttt	ctttaaactg	atctatttt	taattgattg	gttatcgtgt	aaatattaca	4020
372	tagctttaac	tgataatctg	attactttat	ttcgtgtgtc	tttgatcatc	ttgatagtta	4080
374	cagaaccgtc	gactctagag	aagccattta	aatcgccgcc	accatggcca	tcatactcgt	4140
376	acgagcagcg	tcgccggggc	tctccgccgc	cgacagcatc	agccaccagg	ggactctcca	4200
378	gtgctccacc	ctgctcaaga	cgaagaggcc	ggcggcgcgc	cggtggatgc	cctgctcgct	4260
380	ccttqqcctc	cacccgtggg	aggctggccg	tccctcccc	gccgtctact	ccagcctcgc	4320
382	cgtcaacccg	gcgggagagg	ccgtcgtctc	gtccgagcag	aaggtctacg	acgtcgtgct	4380

9/28/05

RAW SEQUENCE LISTING

DATE: 09/28/2005

PATENT APPLICATION: US/10/549,352

file://C:\CRF4\Outhold\VsrJ549352.htm

TIME: 13:53:52

Input Set : A:\70237USPCT SEQUENCE LISTING.txt Output Set: N:\CRF4\09282005\J549352.raw

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384 caageaggee geattgetea aacgeeaget gegeacgeeg gteetegaeg eeaggeeeca
386 ggacatggac atgccacgca acgggctcaa ggaagcctac gaccgctgcg gcgagatctg
                                                                          4500
388 tgaggagtat gccaagacgt tttacctcgg aactatgttg atgacagagg agcggcgccg
                                                                          4560
390 cgccatatgg gccatctatg tgtggtgtag gaggacagat gagcttgtag atgggccaaa
                                                                          4620
392 cgccaactac attacaccaa cagctttgga ccggtgggag aagagacttg aggatctgtt
394 cacgggacgt ccttacgaca tgcttgatgc cgctctctct gataccatct caaggttccc
                                                                          4740
396 catagacatt cagccattca gggacatgat tgaagggatg aggagtgatc ttaggaagac
                                                                          4800
398 aaggtataac aacttcgacg agctctacat gtactgctac tatgttgctg gaactgtcgg
                                                                          4860
400 gttaatgagc gtaccagtga tgggcatcgc atccgagtct aaagcaacaa ctgaaagcgt
                                                                          4920
402 gtacagtgct gccttggctc tcggaattgc gaaccaactc acgaacatac tccgggatgt
                                                                          4980
404 tggagaggat gctagacgag gaaggatata tttaccacaa gatgagcttg cacaggcagg
                                                                          5040
406 gctctctgat gaggacatct tcaaaggggt cgtcacgaac cggtggagaa acttcatgaa
                                                                          5100
408 gaggcagatc aagagggcca ggatgttttt tgaggaggca gagagagggg taactgagct
                                                                         5160
410 ctcacagget ageagatgge cagtatggge tteectgttg ttgtacagge agatectgga
                                                                          5220
                                                                          5280
412 tgagatcgaa gccaacgact acaacaactt cacgaagagg gcgtatgttg gtaaagggaa
414 gaagttgcta gcacttcctg tggcatatgg aaaatcgcta ctgctcccat gttcattgag
                                                                          5340
416 aaatggccag acctagggcc atgcaggccg atccccgatc gttcaaacat ttggcaataa
                                                                          5400
418 agtttcttaa gattgaatcc tgttgccggt cttgcgatga ttatcatata atttctgttg
                                                                          5460
420 aattacgtta agcatgtaat aattaacatg taatgcatga cgttatttat gagatgggtt
                                                                          5520
422 tttatgatta gagtcccgca attatacatt taatacgcga tagaaaacaa aatatagcgc
                                                                          5580
                                                                          5630
424 gcaaactagg ataaattatc gcgcgcggtg tcatctatgt tactagatcg
                                             organism Can be Either
427 <210> SEQ ID NO: 3
429 <211> LENGTH: 5180
431 <212> TYPE: DNA
433 <213> ORGANISM: (SYNTHETIC - 12422
437 <400> SEQUENCE: 3
438 gttaatcatg gtgtaggcaa cccaaataaa acaccaaaat atgcacaagg cagtttgttg
440 tattctgtag tacagacaaa actaaaagta atgaaagaag atgtggtgtt agaaaaggaa
                                                                           120
                                                                           180
442 acaatatcat gagtaatgtg tgagcattat gggaccacga aataaaaaga acattttgat
444 gagtcgtgta tcctcgatga gcctcaaaag ttctctcacc ccggataaga aacccttaag
                                                                           240
                                                                           300
446 caatgtgcaa agtttgcatt ctccactgac ataatgcaaa ataagatatc atcgatgaca
448 tagcaactca tgcatcatat catgcctctc tcaacctatt cattcctact catctacata
                                                                           360
450 agtatettea getaaatgtt agaacataaa eecataagte aegtttgatg agtattagge
                                                                           420
                                                                           480
452 gtgacacatg acaaatcaca gactcaagca agataaagca aaatgatgtg tacataaaac
454 tocagageta tatgteatat tgeaaaaaga ggagagetta taagacaagg catgaeteae
                                                                           540
456 aaaaattcat ttgcctttcg tgtcaaaaag aggagggctt tacattatcc atgtcatatt
                                                                           600 9
                                                                           660 C
458 gcaaaagaaa gagagaaaga acaacacaat gctgcgtcaa ttatacatat ctgtatgtcc
460 atcattatte atccaeettt egtgtaceae aetteatata teatgagtea etteatgtet
                                                                           720
462 ggacattaac aaactctatc ttaacattta gatgcaagag cctttatctc actataaatg
                                                                           780
                                                                           840 2
464 cacgatgatt teteattgtt teteacaaaa ageatteagt teattagtee tacaacaacg
                                                                           900 mg
466 aatteggett eccaaatege egecaceatg gettetatga tateetette egetgtgaca
468 acagteagee gtgeetetag ggggeaatee geegeagtgg etecattegg eggeeteaaa
                                                                           960
470 tecatgactg gatteccagt gaagaaggte aacactgaca ttacttecat tacaagcaat
                                                                          1020
                                                                          1080
472 ggtggaagag taaagtgcat gaaaccaact acggtaattg gtgcaggctt cggtggcctg
474 gcactggcaa ttcgtctaca agctgcgggg atccccgtct tactgcttga acaacgtgat
                                                                          1140
476 aaacccggcg gtcgggctta tgtctacgag gatcaggggt ttacctttga tgcaggcccg
                                                                          1200
                                                                          1260
478 acggttatca ccgatcccag tgccattgaa gaactgtttg cactggcagg aaaacagtta
                                                                          1320
480 aaagagtatg tcgaactgct gccggttacg ccgttttacc gcctgtgttg ggagtcaggg
                                                                          1380
482 aaggtettta attacgataa egateaaace eggetegaag egeagattea geagtttaat
                                                       The type of errors shown exist throughout
                                                     t : Sequence Listing. Please check subsequent
                                                           sequences for similar errors.
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 09/28/2005 PATENT APPLICATION: US/10/549,352 TIME: 13:53:53

Input Set : A:\70237USPCT SEQUENCE LISTING.txt
Output Set: N:\CRF4\09282005\J549352.raw

Use of <220> Peature(NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.

Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32) (Sec.1.823 of new Rules)

Seq#:22

VERIFICATION SUMMARY

DATE: 09/28/2005

PATENT APPLICATION: US/10/549,352

TIME: 13:53:53

Input Set : A:\70237USPCT SEQUENCE LISTING.txt

Output Set: N:\CRF4\09282005\J549352.raw

L:16 M:270 C: Current Application Number differs, Replaced Current Application No

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:2513 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:22

L:2517 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:22, <213>

ORGANISM: Artificial Sequence

L:2517 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:22, <213>

ORGANISM: Artificial Sequence

L:2517 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:22,Line#:2517